

Claims

- [c1] An aerodynamic propulsion system (a "sail"), wherein a collection of "blades" (aerodynamic surfaces) are assembled and "feathered" to adjust pitch.
- [c2] A sail as claimed in claim 1 wherein the blades are mounted vertically about the structure of a boat, connected for pitch control by a central system (such as "line and cam"), thus providing both forward and aft thrust to the boat and a "boom-less turn" (where no large boom must swing around the passenger area of the boat).
- [c3] A sail as claimed in claim 1 wherein the blades are mounted vertically on a "boom", connected for pitch control by a centralizing system (such as a "rack and pinion"), thus providing both forward and aft thrust to the boat and boom yaw adjustment to optimize aerodynamic and hydrodynamic effects – including a "spinnaker" effect.
- [c4] A retrofit as claimed in claim 1 wherein a collection of blades (a "Blade Sail") is attached to the existing traditional sailboat structure (such as mast and booms,) to produce a "multiple blade" sail within a region (and

hardware) where a traditional sail typically exists.